ABSTRACT

Novel bacterial quinolone signal molecules and, more particularly, pseudomonas quinolone signal ("PQS") molecules, *e.g.*, 2-heptyl-3-hydroxy-4-quinolone, and analogs and derivatives thereof are described. Therapeutic compositions containing the molecules, and therapeutic methods, methods of for regulating gene expression, methods for identifying modulators of the autoinducer molecules, and methods of modulating quorum sensing signalling in bacteria using the compounds of the invention are also described.